NBS4 series

Technical details

SILNIKÓW 4"

OPIS

Przezwajalne silniki głębinowe 4" serii NBS4 działają w studniach z wodą o temperaturze nieprzekraczającej 30° C i pH w zakresie od 6,5 do 8,0. Silniki są wypełnione płynem dielektrycznym, tzw. białym olejem, który jest zatwierdzony przez amerykańską agencję FDA oraz przez inne organizacje farmakologiczne na całym świecie. Wymiary przyłączy oraz kołnierz są zgodne ze standardami NEMA, ponieważ te silniki głębinowe zostały zaprojektowane z myślą o działaniu w połączeniu z pompami głębinowymi o tych samych wymiarach przyłączy. Zasilanie może być jednofazowe lub trójfazowe. Gama silników jednofazowych rozpoczyna się od 0,37 kW (0,5 HP) do 4,0 kW (5,5 HP), natomiast gama silników trójfazowcyh od 0,37 kW (0,5 HP) do 7,5 kW (10 HP). Silniki głębinowe są zazwyczaj stosowane w instalacjach pionowych. Niemniej jednak silniki można montować poziomo, ale zawsze i w każdym przypadku po uzyskaniu wcześniejszej zgody ze strony naszego działu technicznego, po całościowej ocenie wnioskowanego zastosowania. Siniki COVERCO mogą być instalowane w studniach 4" o maksymalnej głębokości wynoszącej 250 metrów.

Konstrukcja silników pozwala na łatwe ich przezwajanie oraz szybki montaż i demontaż.

CHARAKTERYSTYKA

- LSilniki elektryczne Coverco 4-calowe zapewniają niezawodne działanie w studniach o średnicy 4" lub większych
- Łożyska osiowe i promieniowe są smarowane olejem i zapewniają bezobsługową pracę silnika
- Specjalna membrana zapewnia kompensację ciśnienia w silniku
- a compensación de presión dentro del motor queda asegurada por una membrana especial

ZALETY

- Wirnik jest umieszczony w kąpieli olejowej
- Materiał użyty dla przewodów zgodny z wymogami dla wody pitnej (KTW)
- Zabezpieczenie antypiaskowe oraz uszczelnienie mechaniczne dla zapewnienia optymalnego działania w przypadku występowania piasku w studni
- Zaprojektowane w celu zapewnienia wysokiej wydajności i niskich kosztów eksploatacji
- Wszystkie silniki są wstępnie napełnione i w 100% przetestowane

DANE TECHNICZNE

- Moc: 0,37 - 7,5 kW
- Kołnierz NEMA 4"
- Stopień ochrony: IP68
- Liczba uruchomień w ciągu godziny: maks. 30
- Działanie w pozycji pionowej i poziomej (tylko po
- uzyskaniu zgody).
- Standardowe napięcie znamionowe:
  - Jednofazowe: 210-220-230 V / 50 Hz
  - Trójfazowe: 380- 415 V/50 Hz; 460 V/60 Hz
- Tolerancja napięciowa: ± 10%
- Ochrona silnika: dobór termicznych przekaźników zgodnie z normami EN 60947-4-1, klasa wyzwalania 10 lub 10 A, czas wyzwalania < 10 s przy 5 x I_N
- Izolacja: klasy F
- Temperatura otoczenia: 30 °C
- Przekrój przewodu: 4 x 1,5 mm^2
- Minimalny przepływ chłodzący 0,08 m/s
- pH wody: 6,5-8
- Obciążenie osiowe: 1500 N, 2500 N, 4500 N (HT-K)

OPCJE

- Specjalne napięcia zasilania, dostępne na zamówienie
- Uszczelnienie mechaniczne z węglika krzemu

PERFORMANCE DATA SINGLE-PHASE - STANDARD VERSION

210-220-230 V AT 50 HZ

Type/ Code	Power		Hz	Voltage [V]	In	LRC / In	R.p.m. [Min-1]	FLT [Nm]	LRT / FLT	BDT / FLT	Efficiency η%			Power factor cosφ			Capacitor [µF]
	[kW]	[HP]									50	75	100	50	75	100	
NBS4 050M 275 846 1040	0.37	0.50	50	210	3.4	3.3	2810	1.26	0.87	2.28	38	48	54	0.93	0.96	0.97	20
				220	3.4	3.4	2830	1.25	0.94	2.54	37	47	53	0.86	0.91	0.95	20
				230	3.5	3.4	2845	1.24	1.05	2.83	34	44	51	0.79	0.85	0.91	20
NBS4 075M 275 847 1040	0.55	0.75	50	210	4.6	3.4	2810	1.87	0.71	2.11	48	58	60	0.92	0.96	0.98	25
				220	4.5	3.5	2830	1.85	0.79	2.37	46	56	59	0.80	0.87	0.95	25
				230	4.7	3.5	2845	1.85	0.88	2.63	43	53	57	0.71	0.81	0.91	25
NBS4 100M 275 848 1040	0.75	1.0	50	210	5.7	3.2	2815	2.54	0.74	2.03	47	58	64	0.94	0.96	0.98	36
				220	5.7	3.6	2830	2.53	0.82	2.20	45	56	63	0.86	0.92	0.96	36
				230	5.8	3.5	2845	2.52	0.88	2.48	42	52	61	0.78	0.86	0.92	36
NBS4 150M 275 850 1040	1.1	1.5	50	210	8.3	3.1	2790	3.79	0.63	1.81	52	61	65	0.90	0.95	0.97	40
				220	8.3	3.3	2810	3.74	0.68	2.00	51	61	64	0.79	0.88	0.95	40
				230	8.6	3.2	2830	3.70	0.75	2.22	47	58	62	0.70	0.81	0.90	40
NBS4 200M 275 851 1040	1.5	2.0	50	210	10.7	3.1	2780	5.16	0.59	2.12	56	65	68	0.94	0.97	0.98	50
				220	10.5	3.3	2810	5.10	0.63	2.35	53	63	67	0.86	0.94	0.97	50
				230	10.7	3.4	2820	5.06	0.70	2.58	50	60	65	0.76	0.86	0.93	50
NBS4 300M 275 852 1040	2.2	3.0	50	210	15.0	4.5	2790	7.52	0.60	2.09	60	68	72	0.96	0.98	0.99	76
				220	14.8	5.5	2810	7.49	0.67	2.20	57	67	71	0.91	0.96	0.98	76
				230	14.5	5.5	2830	7.42	0.73	2.33	54	64	70	0.82	0.91	0.96	76

230-240 V AT 50 HZ

Type/ Code	Power		Hz	Voltage [V]	In	LRC / In	R.p.m. [Min-1]	FLT [Nm]	LRT / FLT	BDT / FLT	Efficiency η%			Power factor cosφ			Capacitor [µF]
	[kW]	[HP]									50	75	100	50	75	100	
NBS4 050M 275 815 1040	0.37	0.50	50	230	3.0	2.9	2800	1.26	0.90	2.3	40	49	56	0.91	0.95	0.97	20
				240	3.0	3.0	2820	1.26	0.97	2.4	37	47	55	0.86	0.91	0.95	
NBS4 075M 275 817 1040	0.55	0.75	50	230	4.0	3.1	2815	1.87	0.67	2.1	45	55	60	0.92	0.95	0.97	25
				240	4.0	3.2	2835	1.86	0.75	2.3	43	52	59	0.86	0.91	0.95	
NBS4 100M 275 818 1040	0.75	1.0	50	230	5.2	2.4	2815	2.54	0.71	2.1	48	58	64	0.92	0.96	0.97	36
				240	5.3	2.4	2830	2.53	0.78	2.3	46	57	63	0.85	0.91	0.95	
NBS4 150M 275 819 1040	1.1	1.5	50	230	7.5	3.1	2800	3.75	0.63	2.0	58	68	72	0.75	0.85	0.95	40
				240	7.7	3.0	2820	3.72	0.69	2.1	53	64	70	0.69	0.80	0.91	
NBS4 200M 275 820 1040	1.5	2.0	50	230	9.5	3.3	2790	5.13	0.60	2.8	59	68	71	0.89	0.95	0.97	50
				240	9.4	3.2	2810	5.10	0.65	2.9	55	65	70	0.81	0.90	0.95	
NBS4 300M 275 821 1040	2.2	3.0	50	230	13.5	3.6	2790	7.55	0.60	2.2	62	70	73	0.95	0.98	0.98	76
				240	13.2	3.6	2810	7.48	0.65	2.5	59	68	72	0.90	0.96	0.97	

220-230 V AT 60 HZ

Type/ Code	Power		Hz	Voltage [V]	In	LRC / In	R.p.m. [Min-1]	FLT [Nm]	LRT / FLT	BDT / FLT	Efficiency η%			Power factor cosφ			Capacitor [µF]	S.F. Amp
	[kW]	[HP]									50	75	100	50	75	100		
NBS4 050M 275 825 1040	0.37	0.50	60	220	3.7	3.9	3460	1.01	1.19	3.4	32	42	48	0.89	0.93	0.95	20	4.7
				230	3.9	3.8	3470	1.02	1.34	3.6	30	40	46	0.82	0.87	0.91	20	4.7
NBS4 075M 275 827 1040	0.55	0.75	60	220	5.0	3.9	3450	1.52	1.35	3.2	34	44	52	0.97	0.98	0.99	31.5	6.3
				230	5.1	4.0	3460	1.51	1.51	3.4	32	42	50	0.92	0.95	0.97	31.5	6.2
NBS4 100M 275 828 1040	0.75	1.0	60	220	6.2	4.1	3460	2.06	0.96	2.8	41	51	58	0.90	0.94	0.97	31.5	7.6
				230	6.4	4.0	3470	2.06	1.06	3.2	38	48	55	0.81	0.87	0.93	31.5	7.6
NBS4 150M 275 829 1040	1.1	1.5	60	220	8.1	3.9	3440	3.05	0.77	2.4	49	59	65	0.88	0.93	0.96	40	9.7
				230	8.3	4.0	3460	3.04	0.87	2.7	43	54	63	0.79	0.86	0.93	40	9.6
NBS4 200M 275 830 1040	1.5	2.0	60	220	10.5	3.9	3420	4.20	0.81	3.6	51	61	67	0.96	0.98	0.99	50	12.5
				230	10.4	4.0	3440	4.20	0.90	4.3	48	58	66	0.90	0.95	0.98	50	12.3
NBS4 300M 275 831 1040	2.2	3.0	60	220	14.9	4.5	3440	6.10	0.74	3.7	55	64	70	0.93	0.96	0.98	76	16.5
				230	15.0	4.5	3460	6.10	0.82	3.7	51	62	68	0.84	0.91	0.95	76	16.4

PERFORMANCE DATA SINGLE-PHASE - HIGH TRUST VERSION

210-220-230 V AT 50 HZ

Type/ Code	Power		Hz	Voltage [V]	In	LRC / In	R.p.m. [Min-1]	FLT [Nm]	LRT / FLT	BDT / FLT	Efficiency η%			Power factor cosφ			Capacitor [µF]
	[kW]	[HP]									50	75	100	50	75	100	
NBS4K 300M 275 852 1140	2.2	3.0	50	210	15.0	4.5	2790	7.52	0.60	2.09	60	68	72	0.96	0.98	0.99	76
				220	14.8	5.5	2810	7.49	0.67	2.20	57	67	71	0.91	0.96	0.98	76
				230	14.5	5.5	2830	7.42	0.73	2.33	54	64	70	0.82	0.91	0.96	76
NBS4K 400M 275 849 4040	3.0	4.0	50	210	19.5	4.9	2910	9.84	1.13	2.22	62	71	75	0.94	0.97	0.98	100+178
				220	19.2	5.1	2920	9.82	1.24	2.43	61	70	74	0.85	0.93	0.96	100+178
				230	19.7	5.1	2930	9.78	1.37	2.68	56	66	73	0.73	0.84	0.92	100+178
NBS4K 500M 275 853 4040	3.7	5.0	50	210	23.4	3.9	2900	12.2	0.85	1.97	63	72	77	0.93	0.97	0.98	130+178
				220	23.1	4.2	2910	12.1	0.91	2.35	60	70	76	0.83	0.91	0.97	130+178
				230	23.9	4.3	2920	12.1	1.01	2.47	53	65	73	0.72	0.84	0.93	130+178
NBS4K 550M 275 854 4040	4.0	5.5	50	210	25.1	4.1	2890	13.2	0.83	1.83	66	74	77	0.93	0.97	0.98	130+178
				220	24.6	4.2	2900	13.1	0.92	2.17	62	72	76	0.85	0.93	0.97	130+178
				230	25.1	4.3	2910	13.1	0.99	2.28	55	67	74	0.75	0.87	0.94	130+178

230-240 V AT 50 HZ

Type/ Code	Power		Hz	Voltage [V]	In	LRC / In	R.p.m. [Min-1]	FLT [Nm]	LRT / FLT	BDT / FLT	Efficiency η%			Power factor cosφ			Capacitor [µF]
	[kW]	[HP]									50	75	100	50	75	100	
NBS4K 400M 275 xxx 4040	3.0	4.0	50	230	18.5	5.0	2910	9.80	1.10	2.4	60	69	72	0.84	0.92	0.97	100+(156-200)
				240	18.8	5.1	2920	9.75	1.20	2.6	55	64	70	0.72	0.84	0.95	
NBS4K 500M 275 xxx 4040	3.7	5.0	50	230	21.5	4.2	2900	12.2	0.84	2.2	64	73	79	0.91	0.96	0.97	130+(156-200)
				240	21.0	4.3	2910	12.1	0.91	2.4	62	72	77	0.82	0.91	0.96	
NBS4K 550M 275 xxx 4040	4.0	5.5	50	230	22.6	4.2	2890	13.2	0.84	1.9	66	75	79	0.93	0.97	0.99	130+(156-200)
				240	22.2	4.3	2900	13.2	0.91	2.2	52	63	71	0.86	0.92	0.96	

220-230 V AT 60 HZ

Type/ Code	Power		Hz	Voltage [V]	In	LRC / In	R.p.m. [Min-1]	FLT [Nm]	LRT / FLT	BDT / FLT	Efficiency η%			Power factor cosφ			Capacitor [µF]	S.F. Amp
	[kW]	[HP]									50	75	100	50	75	100		
NBS4K 400M 275 870 4040	3.0	4.0	60	220	19.5	6.5	3540	8.10	1.5	3.1	54	65	71	0.96	0.97	0.98	120+(156-200)	21.8
				230	19.5	6.6	3550	8.10	1.6	3.2	52	61	69	0.95	0.96	0.97	120+(156-200)	21.0
NBS4K 500M 275 906 4040	3.7	5.0	60	220	24.0	5.3	3540	10.00	1.12	2.5	55	65	71	0.94	0.95	0.96	150+(156-200)	28.0
				230	24.0	5.4	3550	10.00	1.22	2.9	53	63	70	0.94	0.95	0.96	150+(156-200)	27.0
NBS4K 550M 275 806 4040	4.0	5.5	60	220	26.0	4.9	3530	10.80	1.11	2.3	57	68	73	0.94	0.95	0.96	150+(156-200)	29.0
				230	25.5	5.1	3540	10.80	1.22	2.7	54	65	72	0.94	0.95	0.96	150+(156-200)	28.5

LEGENDA	
LRC	Locked Rotor Current (A)
I_N	Nominal Amps
LRT	Locked Rotor Torque
BDT	Breakdown Torque
FLT	Full Load Torque
S.F.	Service Factor

PERFORMANCE DATA THREE-PHASE - STANDARD VERSION

380-400-415 V AT 50 HZ

Type/ Code	Power		Hz	Voltage [V]	In *	LRC / In	R.p.m. [Min-1]	FLT [Nm]	LRT / FLT	BDT / FLT	Efficiency η%			Power factor cosφ		
	[kW]	[HP]									50	75	100	50	75	100
NBS4 050T 274 761 1040	0.37	0.50	50	380	1.35	3.5	2790	1.26	1.7	2.5	40	47	51	0.69	0.77	0.83
				400	1.35	3.7	2820	1.25	1.9	2.7	39	47	51	0.64	0.73	0.79
				415	1.35	3.9	2835	1.25	2.0	3.1	38	46	50	0.61	0.70	0.76
NBS4 075T 274 762 1040	0.55	0.75	50	380	1.85	3.6	2800	1.87	1.8	2.3	47	53	56	0.65	0.75	0.83
				400	1.85	3.8	2830	1.85	2.1	2.5	46	53	56	0.60	0.70	0.78
				415	1.90	3.9	2850	1.84	2.3	2.8	43	52	56	0.55	0.66	0.75
NBS4 100T 274 763 1040	0.75	1.0	50	380	2.20	4.1	2810	2.55	2.3	2.3	54	61	63	0.64	0.75	0.82
				400	2.20	4.2	2835	2.52	2.5	2.5	54	61	63	0.58	0.70	0.78
				415	2.25	4.3	2850	2.51	2.9	2.8	52	60	63	0.54	0.65	0.74
NBS4 150T 274 724 1040	1.1	1.5	50	380	3.00	4.6	2800	3.76	2.6	3.5	63	68	69	0.64	0.76	0.83
				400	3.00	4.7	2830	3.73	2.8	3.8	60	66	68	0.60	0.71	0.79
				415	3.00	4.7	2845	3.71	3.0	3.9	59	65	68	0.55	0.67	0.75
NBS4 200T 274 725 1040	1.5	2.0	50	380	4.00	4.4	2800	5.10	2.6	3.2	63	69	70	0.60	0.73	0.82
				400	4.10	4.5	2825	5.07	2.9	3.5	61	67	69	0.53	0.66	0.76
				415	4.30	4.5	2840	5.05	3.1	3.8	59	66	69	0.48	0.61	0.71
NBS4 300T 274 726 1040	2.2	3.0	50	380	5.50	4.9	2800	7.51	2.4	2.9	70	73	74	0.63	0.76	0.83
				400	5.60	5.0	2825	7.44	2.8	3.1	68	73	74	0.56	0.69	0.78
				415	5.70	5.1	2840	7.39	3.0	3.3	66	72	73	0.50	0.64	0.73
NBS4 400T 274 764 4140	3.0	4.0	50	380	7.40	4.5	2780	10.30	2.5	2.8	73	74	75	0.59	0.73	0.83
				400	7.50	4.6	2810	10.18	2.7	3.2	69	73	74	0.51	0.66	0.78
				415	7.90	4.8	2825	10.16	3.0	3.4	66	72	73	0.47	0.60	0.72
NBS4 550T 274 765 4140	4.0	5.5	50	380	9.60	5.1	2800	13.62	2.8	2.9	77	79	79	0.57	0.72	0.82
				400	9.80	5.1	2820	13.53	3.1	3.1	74	78	78	0.50	0.64	0.77
				415	10.30	5.1	2835	13.48	3.4	3.2	70	76	77	0.45	0.59	0.71
NBS4 750T 274 728 4140	5.5	7.5	50	380	12.60	5.2	2825	18.60	2.5	2.7	79	80	80	0.63	0.77	0.86
				400	12.50	5.4	2845	18.44	2.7	2.8	77	80	80	0.55	0.71	0.82
				415	12.80	5.4	2860	18.37	2.9	3.0	74	79	79	0.50	0.65	0.78

*220-240 V Version: In x 1.73

380 V 60 HZ

Type/ Code	Power		Hz	Voltage [V]	In	LRC / In	R.p.m. [Min-1]	FLT [Nm]	LRT / FLT	BDT / FLT	Efficiency η%			Power factor cosφ			S.F. Amp
	[kW]	[HP]									50	75	100	50	75	100	
NBS4 050T 274 741 1040	0.37	0.50	60	380	1.6	5.6	3500	1.01	4.3	4.7	36	45	50	0.57	0.64	0.70	2.0
NBS4 075T 274 742 1040	0.55	0.75	60	380	2.1	6.0	3500	1.52	4.1	4.6	44	53	59	0.57	0.65	0.72	2.5
NBS4 100T 274 743 1040	0.75	1.0	60	380	2.5	5.1	3480	2.06	3.2	3.6	51	59	63	0.57	0.67	0.75	3.0
NBS4 150T 274 744 1040	1.1	1.5	60	380	3.2	5.8	3470	3.03	3.3	3.2	59	66	69	0.58	0.69	0.76	3.8
NBS4 200T 274 745 1040	1.5	2.0	60	380	4.4	5.3	3470	4.10	3.1	5.0	63	70	71	0.52	0.64	0.71	5.0
NBS4 300T 274 746 1040	2.2	3.0	60	380	5.9	6.0	3470	6.06	3.4	4.1	71	76	77	0.61	0.64	0.74	6.4
NBS4 400T 274 774 4140	3.0	4.0	60	380	8.2	6.0	3470	8.24	3.5	4.3	70	75	77	0.50	0.63	0.73	8.7
NBS4 550T 274 775 4140	4.0	5.5	60	380	10.2	6.3	3450	11.0	3.5	4.0	74	78	80	0.54	0.67	0.76	11.4
NBS4 750T 274 748 4140	5.5	7.5	60	380	13.0	6.5	3490	15.0	3.1	3.8	78	81	83	0.55	0.69	0.78	14.5

220-230 V 60 HZ

Type/ Code	Power		Hz	Voltage [V]	In	LRC / In	R.p.m. [Min-1]	FLT [Nm]	LRT / FLT	BDT / FLT	Efficiency η%			Power factor cosφ			S.F. Amp
	[kW]	[HP]									50	75	100	50	75	100	
NBS4 050T 274 711 1040	0.37	0.50	60	220	2.6	5.1	3470	1.01	3.5	4.0	36	44	49	0.64	0.71	0.77	3.3
				230	2.6	5.2	3490	1.01	3.7	4.1	36	44	49	0.61	0.63	0.73	3.3
NBS4 075T 274 712 1040	0.55	0.75	60	220	3.4	5.4	3480	1.51	3.3	3.9	44	52	57	0.62	0.71	0.77	4.2
				230	3.4	5.3	3500	1.50	3.4	4.1	43	51	56	0.58	0.67	0.73	4.1
NBS4 100T 274 713 1040	0.75	1.0	60	220	4.1	5.0	3460	2.08	2.2	2.9	50	58	61	0.64	0.74	0.80	5.0
				230	4.1	5.1	3480	2.06	2.3	3.3	49	57	61	0.60	0.70	0.77	4.9
NBS4 150T 274 714 1040	1.1	1.5	60	220	5.2	5.4	3450	3.05	2.9	5.8	62	67	70	0.62	0.73	0.80	6.3
				230	5.2	5.6	3470	3.05	3.0	5.8	60	65	70	0.59	0.70	0.77	6.1
NBS4 200T 274 715 1040	1.5	2.0	60	220	6.9	5.3	3460	4.13	2.6	4.3	67	72	74	0.57	0.69	0.77	8.1
				230	7.0	5.9	3470	4.14	3.2	4.6	66	71	74	0.50	0.64	0.74	8.1
NBS4 300T 274 716 1040	2.2	3.0	60	220	9.5	5.4	3440	6.10	3.3	3.7	77	79	80	0.54	0.68	0.77	10.6
				230	9.8	5.4	3460	6.20	3.6	4.2	74	78	79	0.47	0.62	0.73	10.6
NBS4 400T 274 776 4140	3.0	4.0	60	220	14.2	6.0	3470	8.25	3.4	4.3	70	76	77	0.50	0.63	0.73	15.1
				230	15.1	6.2	3490	8.25	3.6	4.5	69	75	76	0.47	0.60	0.66	15.7
NBS4 550T 274 777 4140	4.0	5.5	60	220	16.8	6.4	3450	11.1	3.1	3.4	76	79	80	0.58	0.71	0.79	18.5
				230	17.0	6.3	3460	11.0	3.3	3.6	73	78	80	0.51	0.64	0.75	18.6
NBS4 750T 274 718 4140	5.5	7.5	60	220	21.0	6.4	3470	15.1	2.6	3.0	78	81	82	0.63	0.76	0.84	23.8
				230	21.1	6.4	3485	15.1	2.7	3.2	78	81	82	0.56	0.70	0.79	23.6

460 V 60 HZ

Type/ Code	Power		Hz	Voltage [V]	In	LRC / In	R.p.m. [Min-1]	FLT [Nm]	LRT / FLT	BDT / FLT	Efficiency η%			Power factor cosφ			S.F. Amp
	[kW]	[HP]									50	75	100	50	75	100	
NBS4 050T 264 761 1040	0.37	0.50	60	460	1.2	3.5	3440	1.02	1.7	2.5	40	47	50	0.69	0.77	0.80	-
NBS4 075T 264 762 1040	0.55	0.75	60	460	1.6	3.6	3470	1.52	1.8	2.3	47	55	58	0.65	0.73	0.76	-
NBS4 100T 274 763 1040	0.75	1.0	60	460	2.0	4.1	3470	2.06	2.3	2.3	54	62	65	0.64	0.73	0.76	2.5
NBS4 150T 274 724 1040	1.1	1.5	60	460	2.5	4.6	3460	3.03	2.6	3.5	63	70	74	0.64	0.73	0.78	3.2
NBS4 200T 274 725 1040	1.5	2.0	60	460	3.7	4.4	3460	4.10	2.6	3.2	63	67	70	0.60	0.72	0.75	4.1
NBS4 300T 274 726 1040	2.2	3.0	60	460	5.0	4.9	3460	6.06	2.4	2.9	70	73	75	0.63	0.73	0.76	5.4
NBS4 400T 274 764 4140	3.0	4.0	60	460	6.4	4.5	3450	8.24	2.5	2.8	73	75	78	0.59	0.72	0.75	7.0
NBS4 550T 274 765 4140	4.0	5.5	60	460	8.3	5.1	3460	11.0	2.8	2.9	77	78	80	0.57	0.70	0.74	9.1
NBS4 750T 274 728 4140	5.5	7.5	60	460	10.8	5.2	3480	15.0	2.5	2.7	79	80	81	0.63	0.76	0.80	12.0

LEGENDA	
LRC	Locked Rotor Current (A)
I_N	Nominal Amps
LRT	Locked Rotor Torque
BDT	Breakdown Torque
FLT	Full Load Torque
S.F.	Service Factor

PERFORMANCE DATA THREE-PHASE - HIGH TRUST VERSION

380-415 V AT 50 HZ

Type/ Code	Power		Hz	Voltage [V]	In *	LRC / In	R.p.m. [Min-1]	FLT [Nm]	LRT / FLT	BDT / FLT	Efficiency η%			Power factor cosφ		
	[kW]	[HP]									50	75	100	50	75	100
NBS4K 300T 274 726 1140	2.2	3.0	50	380	5.50	4.9	2800	7.51	2.4	2.9	70	73	74	0.63	0.76	0.83
				400	5.60	5.0	2825	7.44	2.8	3.1	68	73	74	0.56	0.69	0.78
				415	5.70	5.1	2840	7.39	3.0	3.3	66	72	73	0.50	0.64	0.73
NBS4K 400T 274 764 4040	3.0	4.0	50	380	7.40	4.5	2780	10.30	2.5	2.8	73	74	75	0.59	0.73	0.83
				400	7.50	4.6	2810	10.18	2.7	3.2	69	73	74	0.51	0.66	0.78
				415	7.90	4.8	2825	10.16	3.0	3.4	66	72	73	0.47	0.60	0.72
NBS4K 550T 274 765 4040	4.0	5.5	50	380	9.60	5.1	2800	13.62	2.8	2.9	77	79	79	0.57	0.72	0.82
				400	9.80	5.1	2820	13.53	3.1	3.1	74	78	78	0.50	0.64	0.77
				415	10.30	5.1	2835	13.48	3.4	3.2	70	76	77	0.45	0.59	0.71
NBS4K 750T 274 728 4040	5.5	7.5	50	380	12.60	5.2	2825	18.60	2.5	2.7	79	80	80	0.63	0.77	0.86
				400	12.50	5.4	2845	18.44	2.7	2.8	77	80	80	0.55	0.71	0.82
				415	12.80	5.4	2860	18.37	2.9	3.0	74	79	79	0.50	0.65	0.78
NBS4K 1000T 274 729 4040	7.5	10.0	50	380	16.90	5.1	2810	25.50	2.4	2.5	80	80	80	0.65	0.79	0.87
				400	16.90	5.3	2835	25.26	2.6	2.6	78	80	80	0.57	0.72	0.83
				415	17.30	5.3	2850	25.05	2.7	2.7	75	79	79	0.51	0.66	0.77

380 V 60 HZ

Type/ Code	Power		Hz	Voltage [V]	In *	LRC / In	R.p.m. [Min-1]	FLT [Nm]	LRT / FLT	BDT / FLT	Efficiency η%			Power factor cosφ			S.F. Amp
	[kW]	[HP]									50	75	100	50	75	100	
NBS4K 1000T 274 749 4040	7.5	10	60	380	17.8	6.5	3480	20.6	2.9	3.3	77	80	81	0.57	0.71	0.80	19.4

220-230 V 60 HZ

Type/ Code	Power		Hz	Voltage [V]	In	LRC / In	R.p.m. [Min-1]	FLT [Nm]	LRT / FLT	BDT / FLT	Efficiency η%			Power factor cosφ			S.F. Amp
	[kW]	[HP]									50	75	100	50	75	100	
NBS4K 1000T 274 719 4040	7.5	10	60	220	29.0	5.9	3440	20.8	2.6	2.6	78	79	80	0.64	0.78	0.85	32.6
				230	29.0	6.0	3460	20.7	2.8	2.8	76	79	80	0.58	0.72	0.81	32.0

460 V 60 HZ

Type/ Code	Power		Hz	Voltage [V]	In	LRC / In	R.p.m. [Min-1]	FLT [Nm]	LRT / FLT	BDT / FLT	Efficiency η%			Power factor cosφ			S.F. Amp
	[kW]	[HP]									50	75	100	50	75	100	
NBS4K 1000T 274 729 4040	7.5	10	60	460	14.5	5.1	3470	20.6	2.4	2.5	80	80	80	0.65	0.76	0.80	15.9

LEGENDA	
LRC	Locked Rotor Current (A)
I_N	Nominal Amps
LRT	Locked Rotor Torque
BDT	Breakdown Torque
FLT	Full Load Torque
S.F.	Service Factor

RESISTANCE VALUES

SINGLE-PHASE ± 5% (25 °C) / 210-220-230 V 50 HZ

Type	[kW]	Ω (Main)	Ω (Start)	Watt 220 V	Amps 220 V
NBS4 050 M	0.37	6.50	14.8	400	2.5
NBS4 075 M	0.55	4.50	9.20	480	3.0
NBS4 100 M	0.75	3.55	7.60	550	3.8
NBS4 150 M	1.10	2.55	6.90	770	5.8
NBS4 200 M	1.50	2.00	4.90	990	6.6
NBS4 300 M	2.20	1.25	3.00	1100	7.8
NBS4K 400 M	3.00	0.90	2.00	1500	10.6
NBS4K 500 M	3.70	0.76	1.85	1800	14.5
NBS4K 550 M	4.00	0.76	1.85	1800	14.5

SINGLE-PHASE ± 5% (25 °C) / 230-240 V 50 HZ

Type	[kW]	Ω (Main)	Ω (Start)	Watt 240 V	Amps 240 V
NBS4 050 M	0.37	7.90	12.5	370	2.1
NBS4 075 M	0.55	4.10	6.30	400	2.7
NBS4 100 M	0.75	5.50	7.30	550	3.6
NBS4 150 M	1.10	3.00	5.50	720	6.2
NBS4 200 M	1.50	2.30	4.00	850	6.5
NBS4 300 M	2.20	1.50	2.45	1000	7.0
NBS4K 400 M	3.00	1.00	1.80	1200	10.0
NBS4K 500 M	3.70	0.90	1.45	1450	13.5
NBS4K 550 M	4.00	0.90	1.45	1450	13.5

THREE-PHASE ± 5% (25 °C) 380-415 V 50 HZ

Type	[kW]	Ω	Input Power Watt 400 V	No Load Amps 400 V
NBS4 050 T	0.37	54	320	1.05
NBS4 075 T	0.55	40	360	1.40
NBS4 100 T	0.75	26.4	320	1.65
NBS4 150 T	1.10	16.1	340	2.05
NBS4 200 T	1.50	12.3	480	3.25
NBS4 300 T	2.20	7.7	590	3.90
NBS4 400 T	3.00	5.5	780	5.90
NBS4 550 T	4.00	3.8	990	7.70
NBS4 750 T	5.50	3.0	1000	8.55
NBS4K 1000 T	7.50	2.2	1300	11.3

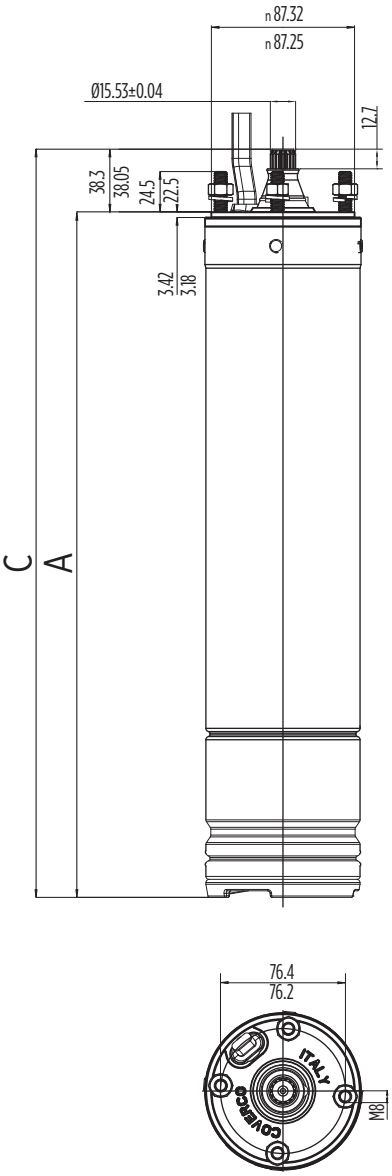
DIMENSIONAL DATA AND DRAWING

SINGLE-PHASE MOTORS 50 HZ

Type	Axial trust	kW	Tot. A [mm]	Tot. C [mm]	Weight [Kg]	Oil [Kg]
NBS4 050 M	1500N/150 Kg.	0.37	364	402	8.1	0.71
NBS4 075 M	1500N/150 Kg.	0.55	389	427	9.2	0.72
NBS4 100 M	1500N/150 Kg.	0.75	411	449	10.3	0.76
NBS4 150 M	2500N/250 Kg.	1.10	434	472	11.4	0.79
NBS4 200 M	2500N/250 Kg.	1.50	467	505	12.8	0.76
NBS4 300 M	2500N/250 Kg.	2.20	565	603	17.4	0.86
NBS4K 300 M	4500N/450 Kg.	2.20	565	603	17.4	0,.84
NBS4K 400 M	4500N/450 Kg.	3.00	680	718	24.1	0.90
NBS4K 500 M	4500N/450 Kg.	3.70	680	718	24.1	0.86
NBS4K 550 M	4500N/450 Kg.	4.00	680	718	24.1	0.93

THREE-PHASE MOTORS 50 HZ

Type	Axial trust	kW	Tot. A [mm]	Tot. C [mm]	Weigh [Kg]	Oil [Kg]
NBS4 050 T	1500N/150 Kg.	0.37	350	388	7.4	0.70
NBS4 075 T	1500N/150 Kg.	0.55	364	402	8.0	0.71
NBS4 100 T	1500N/150 Kg.	0.75	384	422	8.8	0.72
NBS4 150 T	2500N/250 Kg.	1.10	411	449	10.6	0.70
NBS4 200 T	2500N/250 Kg.	1.50	428	466	10.8	0.74
NBS4 300 T	2500N/250 Kg.	2.20	467	505	12.5	0.78
NBS4 400 T	2500N/250 Kg.	3.0	522	560	15.0	0.80
NBS4 550 T	2500N/250 Kg.	4.0	587	625	18.3	0.82
NBS4 750 T	2500N/250 Kg.	5.5	687	725	24.3	0.86
NBS4K 300 T	4500N/450 Kg.	2.2	467	505	12.5	0.78
NBS4K 400 T	4500N/450 Kg.	3.0	522	560	15.0	0.80
NBS4K 550 T	4500N/450 Kg.	4.0	587	625	18.3	0.82
NBS4K 750 T	4500N/450 Kg.	5.5	687	725	24.3	0.86
NBS4K 1000 T	4500N/450 Kg.	7.5	768	806	28.3	1.09

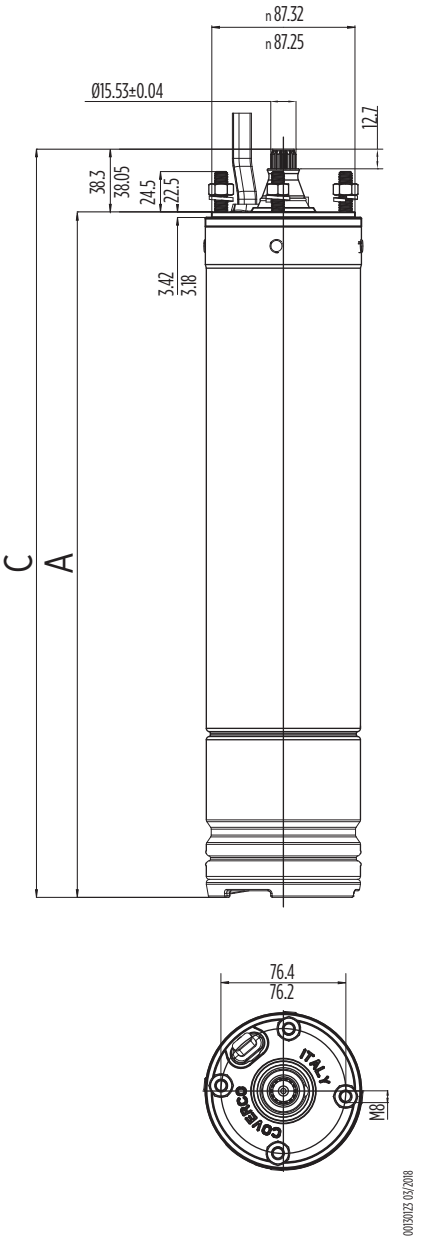


SINGLE-PHASE MOTORS 60 HZ

Type	Axial trust	kW	Tot. A [mm]	Tot. C [mm]	Weight [Kg]	Oil [Kg]
NBS4 050 M	1500N/150 Kg.	0.37	389	427	9.2	0.71
NBS4 075 M	1500N/150 Kg.	0.55	411	449	10.3	0.72
NBS4 100 M	1500N/150 Kg.	0.75	411	449	10.3	0.76
NBS4 150 M	2500N/250 Kg.	1.10	434	472	11.4	0.79
NBS4 200 M	2500N/250 Kg.	1.50	467	505	12.8	0.76
NBS4 300 M	2500N/250 Kg.	2.20	565	603	17.4	0.86
NBS4K 300 M	4500N/450 Kg.	2.20	565	603	17.4	0,.84
NBS4K 400 M	4500N/450 Kg.	3.00	680	718	24.1	0.90
NBS4K 500 M	4500N/450 Kg.	3.70	680	718	24.1	0.86
NBS4K 550 M	4500N/450 Kg.	4.00	680	718	24.1	0.93

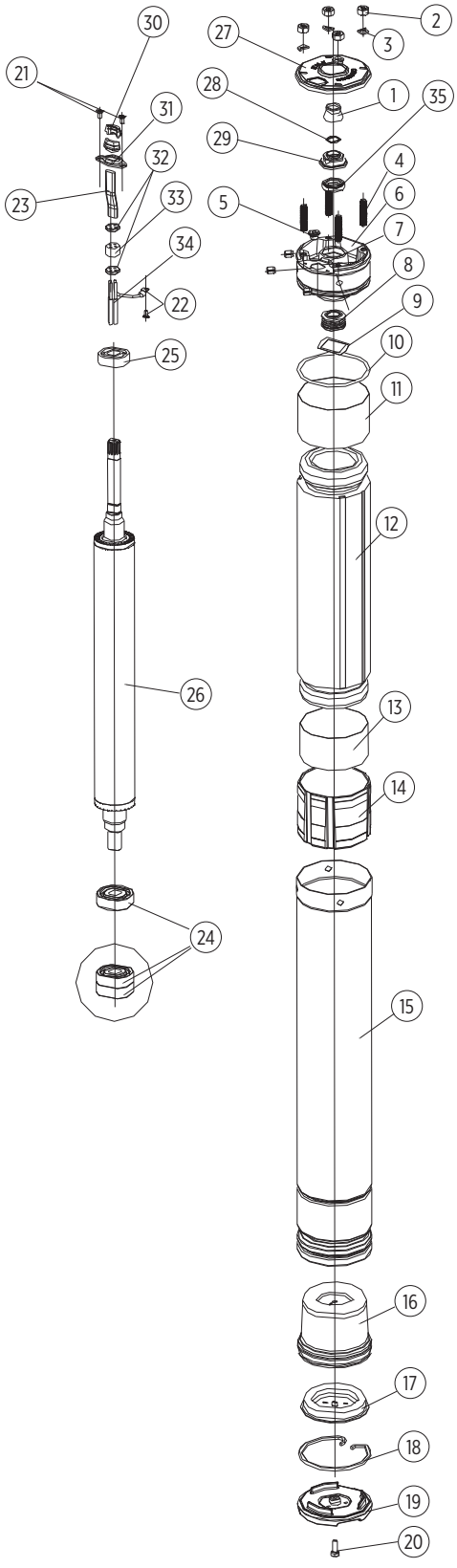
THREE-PHASE MOTORS 60 HZ

Type	Axial trust	kW	Tot. A [mm]	Tot. C [mm]	Weigh [Kg]	Oil [Kg]
NBS4 050 T	1500N/150 Kg.	0.37	364	402	8.0	0.70
NBS4 075 T	1500N/150 Kg.	0.55	384	422	8.8	0.71
NBS4 100 T	1500N/150 Kg.	0.75	384	422	8.8	0.72
NBS4 150 T	2500N/250 Kg.	1.10	411	449	10.6	0.70
NBS4 200 T	2500N/250 Kg.	1.50	428	466	10.8	0.74
NBS4 300 T	2500N/250 Kg.	2.20	467	505	12.5	0.78
NBS4 400 T	2500N/250 Kg.	3.0	522	560	15.0	0.80
NBS4 550 T	2500N/250 Kg.	4.0	587	625	18.3	0.82
NBS4 750 T	2500N/250 Kg.	5.5	687	725	24.3	0.86
NBS4K 300 T	4500N/450 Kg.	2.2	467	505	12.5	0.78
NBS4K 400 T	4500N/450 Kg.	3.0	522	560	15.0	0.80
NBS4K 550 T	4500N/450 Kg.	4.0	587	625	18.3	0.82
NBS4K 750 T	4500N/450 Kg.	5.5	687	725	24.3	0.86
NBS4K 1000 T	4500N/450 Kg.	7.5	768	806	28.3	1.09



SPARE PART LIST AND SECTIONAL DRAWING

#	Part description	Q.ty	Material
1	Sand slinger	1	NBR
2	Nut	4	304 SS
3	Washer	4	304 SS
4	Stud	4	304 SS
5	Oil fill plug	1	Brass
6	Top end bracket	1	Powder coated cast-iron
7	Lock pins	4	304 SS
8	Mechanical shaft seal	1	Nitrile-Carbon and ceramic face seal
9	Wavy spring	1	High carbon steel (C70)
10	O-ring gasket for top end bell	1	NBR
11	Insulation Roll up	1	Mylar A
13			Mylar A
12	Wound stator	1	Copper wire
14	Bottom end bell	1	Aluminium
15	Motor outer shell	1	304 SS
16	Pressure equalization Diaphragm	1	Buna N
17	Cover Diaphragm	1	304 SS
18	Snap ring	1	304 SS
19	Shell protector	1	Polyphenylene ether + PS (PPE+PS)
20	Lock screw for shell protector	1	304 SS
21	Screw for lead clamp	2	304 SS
22	Grounding screw	1	Steel+zinc
	Lock washer	1	
23	Lead	1	VPE+EPR
24	Lower ball bearing	1/2	Stainless steel
25	Upper ball bearing	1	Stainless steel
26	Rotor with shaft	1	Steel/304 SS/AL/Cu
27	Top end bell cover	1	304 SS
28	Washer	1	304 SS
29	Sand slinger base	1	Polyacetal (POM)
30	Lead seal bushing	2	Nylon
32	Lead pressure disk	2	Polyamid
33	Lead fix rubber	1	NBR
31	Lead Clamp	1	304 SS
34	Parallel connectors	3	CuZn+Sn
35	Lip seal	1	NBR
	Filling non-toxic oil	Kg.	Marcol 152
	Instruction sticker	1	-
	Lead jacket g6	4	-



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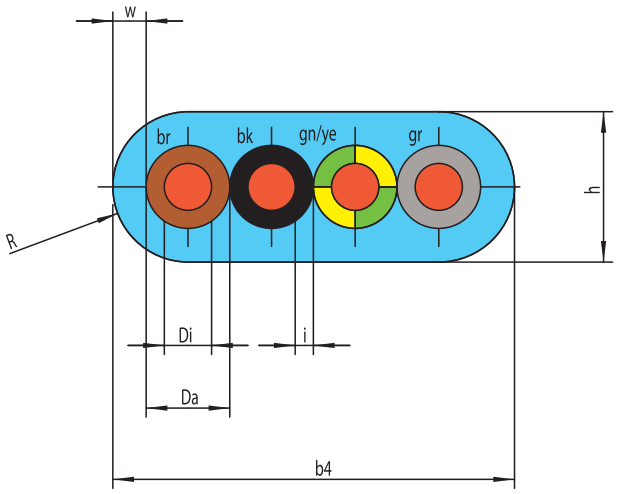
MOTOR LEADS

Type	Di	i	Da	w	R	b4	h
4x1.5	1.5	0.6	2.7	1.9	2.5	14.6	5.1

DIMENSIONS

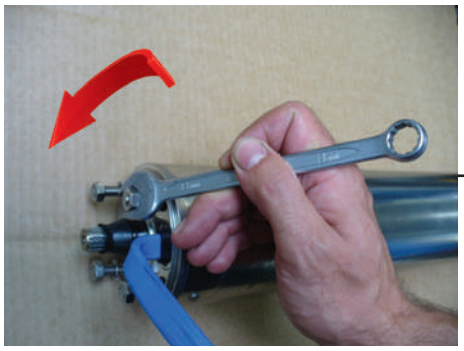
Standard cable	Lengths [mt]
0,37 kW - 2,2 kW	1,5
3,0 kW - 5,5 kW	2,5
7,5 kW	3,5



br = brown
bk = black
gn/ye = green / yellow
gr = grey

DISASSEMBLY

01



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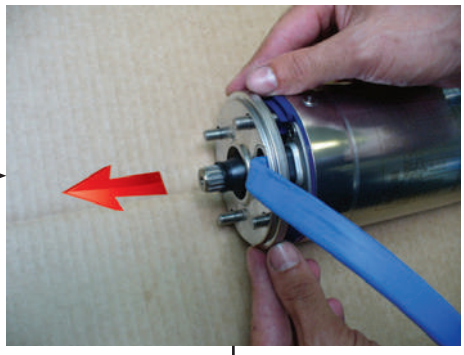
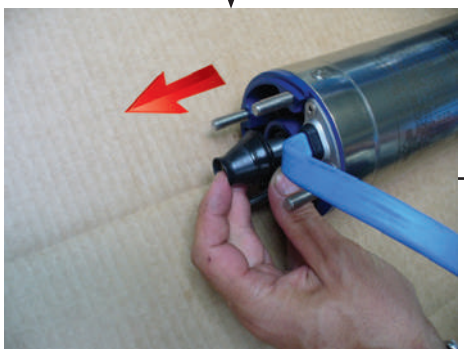


03



04

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DISASSEMBLY

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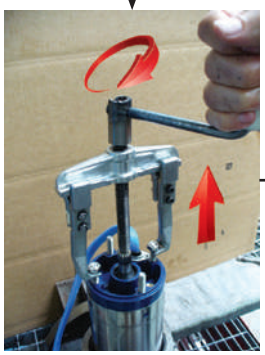

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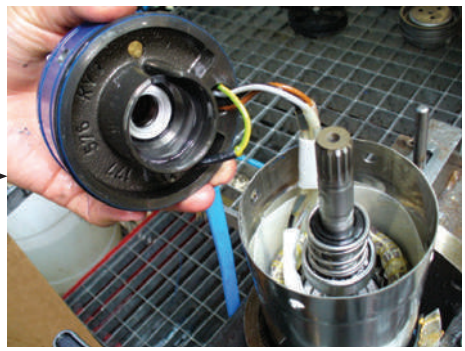

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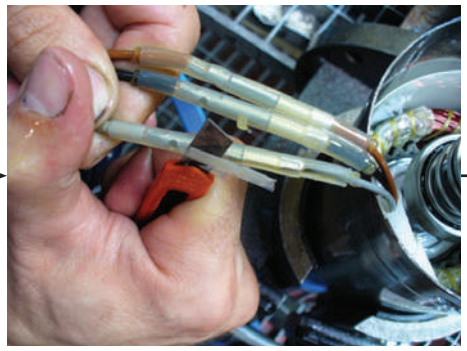

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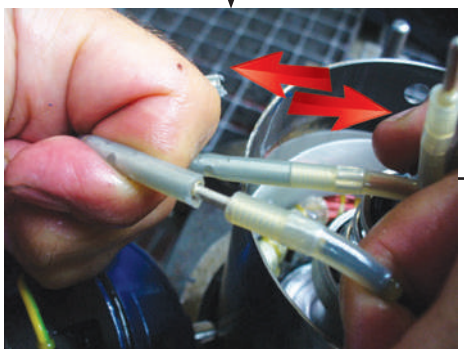

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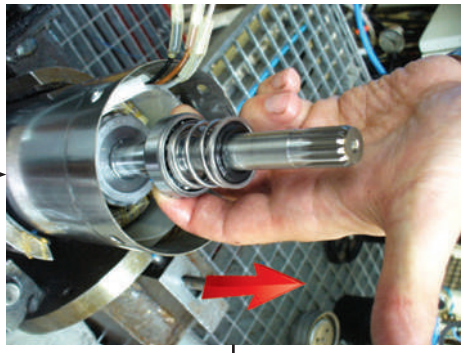

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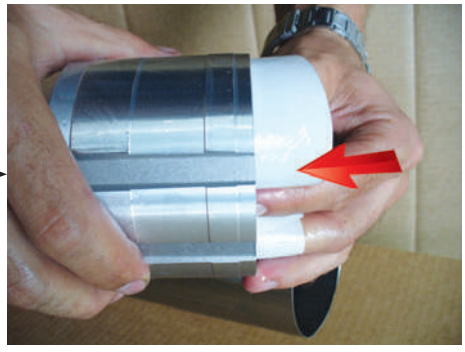

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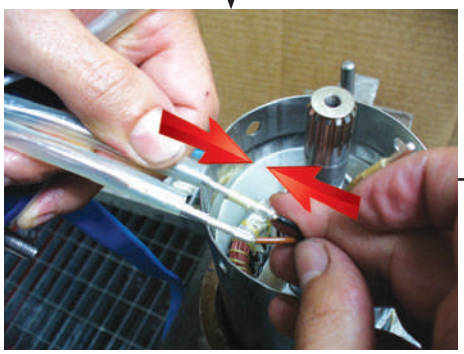

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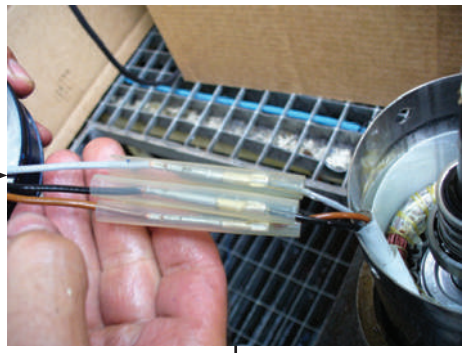

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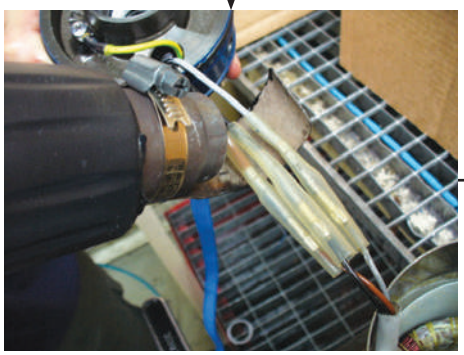

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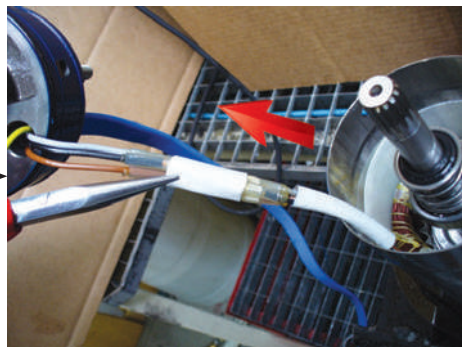

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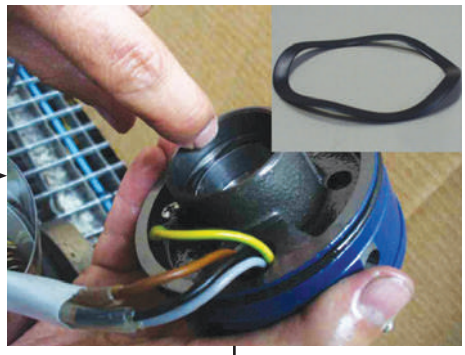

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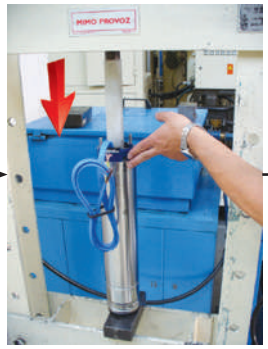

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